

SILTFENCE W/SILT
"SOXX" DETAIL
(NOT TO SCALE)

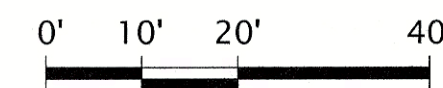
ZONE: RA

MINIMUM LOT AREA = 40,000 S.F.
MINIMUM LOT FRONTAGE = 160'

MINIMUM SETBACKS
FRONT = 40'
SIDE = 25'
REAR = 50'

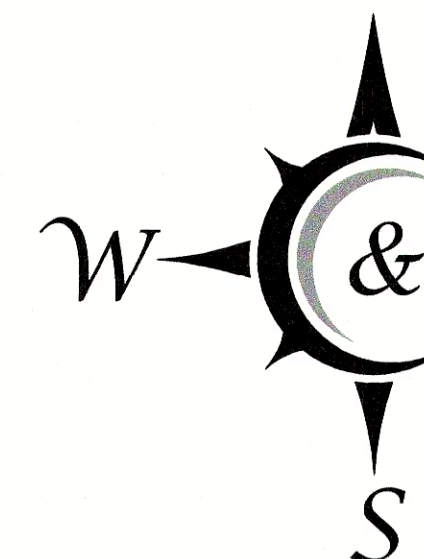
PLAN OF LAND 19 LITTLE MEADOW WAY NORTH READING, MA

SCALE: 1" = 20'



DATE: AUGUST 28, 2021
REVISED: DECEMBER 7, 2021
REVISED: JANUARY 4, 2021

SHOWING PROPOSED BARN AND DRIVEWAY



**WILLIAMS
&
SPARAGES**

ENGINEERS | PLANNERS | SURVEYORS
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MIDDLETON, MA 01949
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Christ P. Sparages
(1/5/22)

PROPOSED BUFFER ZONE ENHANCEMENT PLANTINGS:

RED MAPLE (ACER RUBRUM) - SIX (6)
Highbush Blueberry (VACCINIUM CORYMBOSUM) - TWELVE (12)

IMPERVIOUS AREA CALCULATION:

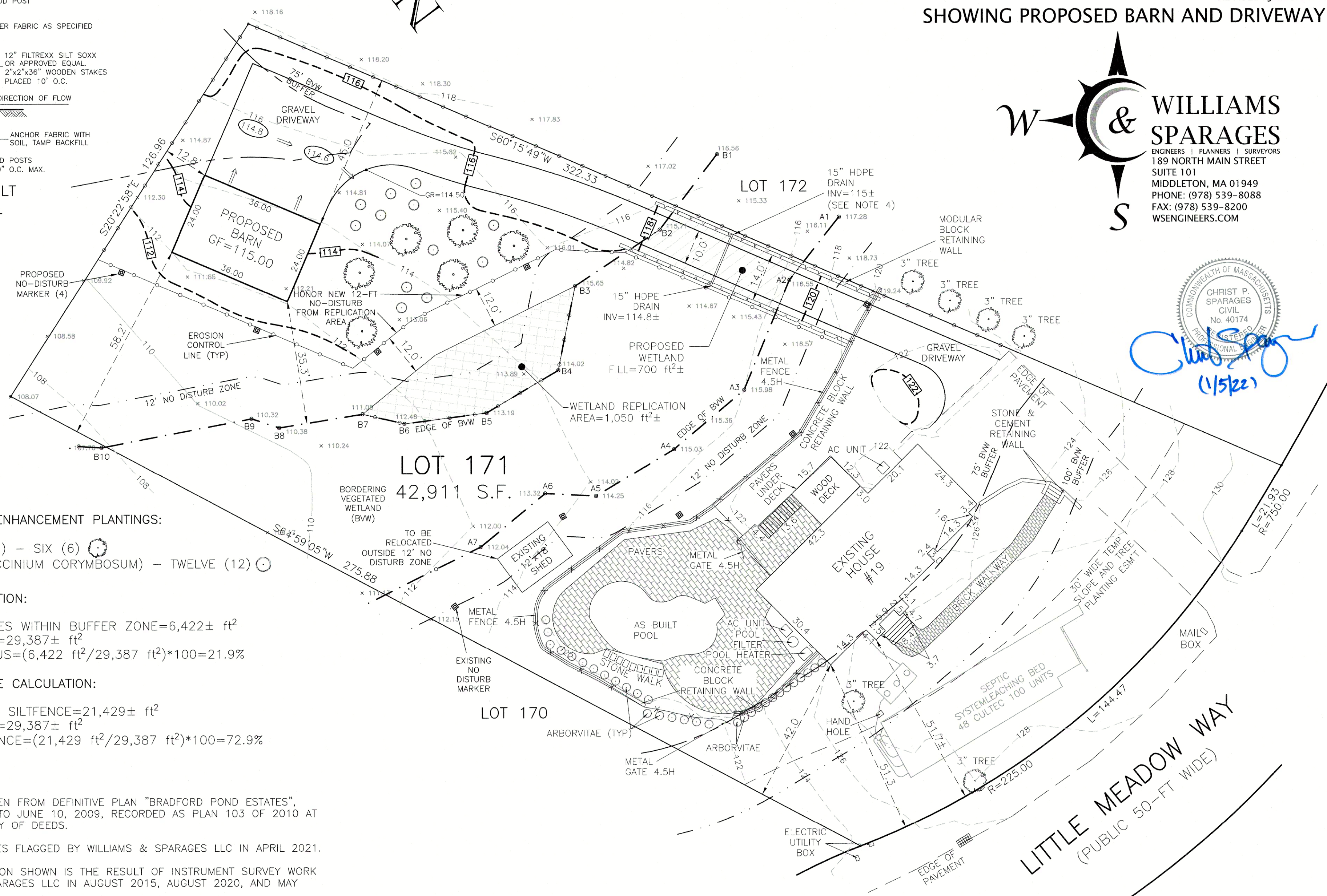
TOTAL IMPERVIOUS SURFACES WITHIN BUFFER ZONE=6,422± ft²
TOTAL BUFFER ZONE AREA=29,387± ft²
% BUFFER ZONE IMPERVIOUS=(6,422 ft²/29,387 ft²)*100=21.9%

BUFFER ZONE DISTURBANCE CALCULATION:

TOTAL DISTURBANCE WITHIN SILTFENCE=21,429± ft²
TOTAL BUFFER ZONE AREA=29,387± ft²
% BUFFER ZONE DISTURBANCE=(21,429 ft²/29,387 ft²)*100=72.9%

NOTES

1. PERIMETER INFORMATION TAKEN FROM DEFINITIVE PLAN "BRADFORD POND ESTATES", DATED NOV. 3, 2008, REVISED TO JUNE 10, 2009, RECORDED AS PLAN 103 OF 2010 AT THE MIDDLESEX SOUTH REGISTRY OF DEEDS.
2. LIMIT OF WETLAND RESOURCES FLAGGED BY WILLIAMS & SPARAGES LLC IN APRIL 2021.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS THE RESULT OF INSTRUMENT SURVEY WORK CONDUCTED BY WILLIAMS & SPARAGES LLC IN AUGUST 2015, AUGUST 2020, AND MAY 2021.
4. WETLAND FILL AND REPLICATION AREAS NOT INCLUDED IN THE BUFFER ZONE DISTURBANCE CALCULATIONS.
5. CONTRACTOR SHALL LAY THE 15-INCH PIPE AT THE LOW POINT WHERE WATER FLOWS THROUGH THE WETLAND AND SLOPE THE PIPE TO PROVIDE A POSITIVE FLOW OF WATER FROM SOUTH TO NORTH.



LITTLE MEADOW WAY
(PUBLIC 50-FT WIDE)

NOTES

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WETLAND REPLICATION AREA CONSTRUCTION METHODOLOGY:

1. SILT FENCE SHALL BE TRENCHED ALONG THE EDGE OF THE RESOURCE AREA ABOVE AND BELOW THE PROPOSED REPLICATION AREA.
2. AFTER THE EXCAVATION OF THE REPLICATION AREA, THE WETLAND REPLICATION AREA SHALL BE EXCAVATED TO A DEPTH OF AT LEAST ONE (1) FOOT BELOW THE PROPOSED FINISH GRADE UNDER THE DIRECTION OF A PROFESSIONAL WETLAND SCIENTIST OR CERTIFIED SOIL EVALUATOR. NOTE: IT MAY BE NECESSARY TO EXCAVATE TO A DEEPER DEPTH TO ENSURE THAT PROPER HYDROLOGY WILL BE ACHIEVED.
3. SOIL AMENDMENTS AND/OR PREVIOUSLY EXCAVATED MATERIAL SHALL BE ADDED TO THE REPLICATION AREA. A MIXTURE OF EQUAL VOLUMES OF ORGANIC AND MINERAL MATERIALS SHALL BE DEPOSITED INTO THE RESTORATION AREA UNTIL THE PROPOSED FINISH GRADE IS ACHIEVED (SEE SOIL DETAIL BELOW). THE SOIL AMENDMENTS SHALL BE UNCONTAMINATED AND SHOULD NOT INCLUDE ANY WOODCHIPS WITH A PREFERENCE GIVEN TOWARDS REUSING EXISTING EXCAVATED WETLAND SOILS. CLEAN LEAF COMPOST IS THE PREFERRED SOIL AMENDMENT TO ACHIEVE THIS STANDARD. MINERAL MATERIALS SHOULD BE PREDOMINANTLY IN THE LOAM, LOAMY SAND TO SILT LOAM TEXTURE RANGE, WITH MINIMAL QUANTITIES OF GRAVEL OR ROCK. TO ENSURE PROPER HYDROLOGY IS ACHIEVED THIS WORK SHALL BE DONE UNDER THE DIRECTION OF A PROFESSIONAL WETLAND SCIENTIST OR CERTIFIED SOIL EVALUATOR.
4. ONCE PROPER HYDROLOGY IS ACHIEVED AND THE SOIL AMENDMENTS HAVE BEEN ADDED, THE AREA SHALL BE PLANTED WITH THE SPECIES SPECIFIED USING HAND TOOLS UNDER THE DIRECTION OF A PROFESSIONAL WETLAND SCIENTIST. SPECIES SHALL BE ACQUIRED FROM A NURSERY SPECIALIZING IN THE PROPAGATION OF WETLAND PLANTS.
5. FOLLOWING THE PLANTING EFFORT THE AREA SHALL BE SCARIFIED USING A STEEL RAKE AND THEN SEEDED WITH THE SPECIFIED SEED MIX AT THE SPECIFIED APPLICATION RATE. NOTE: THE RECOMMENDED APPLICATION RATE HAS BEEN DOUBLED TO ACHIEVE PROPER COVERAGE AND STABILIZATION.
6. FOLLOWING THE PLANTING EFFORT, AT LEAST 75% OF THE SURFACE OF THE REPLACEMENT AREA MUST BE RE-ESTABLISHED WITH INDIGENOUS WETLAND PLANT SPECIES WITHIN TWO (2) GROWING SEASONS. MONITORING WILL OCCUR DURING THIS PERIOD AND SPECIES SHALL BE REPLACED UNDER THE DIRECTION OF A PROFESSIONAL WETLAND SCIENTIST UNTIL AT LEAST 75% COVERAGE IS ACHIEVED. IF AT THE END OF THE SECOND COMPLETE GROWING SEASON PROPER COVERAGE IS NOT ACHIEVED, MONITORING SHALL CONTINUE UNTIL PROPER COVERAGE IS ACHIEVED. DURING THE MONITORING PERIOD INVASIVE SPECIES SHALL BE REMOVED BY HAND PULLING AND BE REMOVED FROM THE SITE.

PLAN OF LAND
19 LITTLE MEADOW WAY
NORTH READING, MA

SCALE: 1" = 10' DATE: AUGUST 28, 2021
REVISED: JANUARY 4, 2021

SHOWING PROPOSED PLANTING PLAN
FOR WETLAND REPLICATION AREA

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GRADATION CHART OF
GRANULAR SOIL FOR
WETLAND SOIL MIX

SIEVE SIZE	% PASSING
NO. 16	100%
NO. 40	85-100%
NO. 60	40-100%
NO. 200	5-10%

REMOVE EXISTING VEGETATION AND GRUB AREA WITHIN REPLICATION AREA. REMOVE EXISTING TOPSOIL LAYER, EXCAVATING TO AN OVERALL DEPTH OF 1.5-FT BELOW THE EXISTING SURFACE. THEN APPLY THE NEW 12-INCH LAYER OF WETLAND REPLICATION SOIL MIXTURE DESCRIBED BELOW.

*THE BOTTOM 12-INCHES OF REPLICATION AREA SHALL CONSIST OF A LOW PERMEABILITY SOIL MIXTURE CONSISTING OF 2 PARTS GRANULAR SOIL (SEE GRADATION); 2 PARTS SOIL WITH USCS DESIGNATION OF ML (SILT) & 1 PART WELL PULVERIZED & COMPOSTED LEAF MULCH.

